

March 9, 1964

FISHERIES MANAGEMENT PROJECT EVALUATION

F-5-R-13 Central Montana Fisheries Study--Steve E. Swedberg

Job III. Investigation of Previously Rehabilitated Waters with
Regard to Fish Growth and Optimum Planting Time and
Numbers to Use in the Initial and Successive Plants

This study is an evaluation of trout plants in five rehabilitated reservoirs Ackley, Eureka, Willow Creek, Bynum and Martinsdale. The investigation was designed to evaluate fish growth, completeness of rough fish eradication, and the most satisfactory time, size and numbers to use in the initial and successive plants. Angler creel census, gill nets and seines were used to sample the plants of trout.

Ackley Reservoir was the only impoundment where a definite marking system was used to identify plants of trout. Most of the plants were marked by clipping one or more of the fins. Of seven plants in Ackley, two plants, one in April 1959 and the other in late March 1961, were ineffective for few fish were ever caught by anglers or gill nets. So far, two plants have shown up very well in the samples collected, a brook trout plant in September 1959 and a rainbow trout plant in June 1961. The average length-weight gain per month for Ackley was poor compared to the gains made by trout in the four other reservoirs. Also, suckers and carp are abundant in the reservoir. Ackley Reservoir will be treated with rotenone products in 1964.

Two plants of rainbow trout in Eureka Reservoir exhibited the following growth rates: (a) The June 1962 plant of 4-inch rainbow trout averaged 9.5 inches in total length and 0.30 of a pound after nine months. (b) The April 1961 plant of 3-inch rainbow trout averaged 18.6 inches in total length and 2.36 pounds after 23 months.

Four-inch rainbow trout stocked for five months in Bynum Reservoir reached an average of 10.2 inches in total length and 0.44 of a pound; the largest gain in length, on a per month basis, of trout in any of the five reservoirs. The ditch-rider for the Bynum Irrigation Project reported that Bynum may be completely drained in 1964.

Martinsdale Reservoir produced rainbow trout averaging 9.4 inches in total length and weighing 0.31 of a pound, five months after being planted. In late 1963 some of the local sportsmen expressed the opinion that Martinsdale was over-stocked with trout. We plan to set gill nets in Martinsdale Reservoir in March 1964 to ascertain the growth rates of the various plants of trout.

We will drop this project as a separate entity, but will carry through additional investigation under Job I Inventory of Waters of the Project Area.